

CLAIMS

WE CLAIM:

1. A radiation exposure recording device comprising:
a radiation exposure recording medium;
a housing that at least partly surrounds the radiation exposure recording medium;
5 a first detector that detects a first radiation exposure and produces at least one signal in response to detecting the first radiation exposure.
2. The radiation exposure recording device of claim 1, wherein the first detector includes a clock circuit and determines a time at which the radiation exposure has occurred.
3. The radiation exposure recording device of claim 2, wherein the detector includes a liquid crystal display that provides an indication of the time at which the radiation exposure has occurred.
4. The radiation exposure recording device of claim 1, wherein the radiation exposure recording medium is a radiation-sensitive film.
5. The radiation exposure recording device of claim 1, wherein the radiation exposure recording medium is a photostimulable plate.
6. The radiation exposure recording device of claim 5, wherein the radiation exposure recording medium stores radiographic information in a digital manner that is readable by a reading mechanism.
7. The radiation exposure recording device of claim 1, wherein the radiation exposure recording medium is at least partly contained within a cassette housing.

8. The radiation exposure recording device of claim 1, wherein the detector is located on the radiation exposure recording medium and both the detector and the radiation recording medium are substantially contained within a cassette housing.
9. The radiation exposure recording device of claim 8, wherein the cassette housing includes a window and, when the detector provides the electric signal, an indication of the radiation exposure is visible through the cassette housing by way of the window.
10. The radiation exposure recording device of claim 1, wherein the detector is located on a surface of a cassette housing that substantially contains the radiation exposure recording medium.
11. The radiation exposure recording device of claim 10, wherein the detector is in the form of at least one of a sticker, a label and a card that is affixed to the surface of the cassette.
12. The radiation exposure recording device of claim 1, wherein the electric signal is in turn communicated at least indirectly to a remote device.
13. The radiation exposure recording device of claim 12, wherein the detector includes a photo-emitting diode, wherein the photo-emitting diode produces a light signal when the radiation exposure has occurred and the light signal is in turn converted into the electric signal.
14. The radiation exposure recording device of claim 12, further comprising a wireless transmitter, wherein the electric signal is provided to the wireless transmitter, and wherein the wireless transmitter in turn communicates a wireless signal based upon the electric signal to the remote device.

15. The radiation exposure recording device of claim 12, wherein the electric signal is communicated to the remote device by way of an output terminal of the detector.
16. The radiation exposure recording device of claim 1, wherein the electric signal is communicated to a cassette reader.
17. The radiation exposure recording device of claim 1, wherein the detector is implemented at least in part using at least one of a microprocessor and an application-specific integrated circuit.
18. The radiation exposure recording device of claim 1, further comprising a second detector, wherein the first detector detects the first radiation exposure with respect to a first portion of the radiation exposure recording device, and the second detector detects a second radiation exposure with respect to a second portion of the radiation exposure device.
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19. The radiation exposure recording device of claim 1, wherein the radiation exposure recording medium is capable of being utilized as part of an x-ray radiography machine and a CT machine.
20. The radiation exposure recording device of claim 1, wherein the detecting of the first radiation exposure includes determining that the first radiation exposure equaled or exceeded a first threshold.
21. The radiation exposure recording device of claim 1, wherein the detecting of the first radiation exposure includes determining an accumulated amount of radiation exposure.
22. The radiation exposure recording device of claim 21, wherein the first detector is capable of outputting a signal that is at least one of: indicative of the

accumulated amount of radiation exposure; and a control signal capable of causing a radiation source to modify its operation.

23. A radiation exposure detection device for implementation on a radiography cassette, the detection device comprising:

a radiation-sensitive component that provides a signal upon being exposed to radiation; and

5 a mechanism capable of attaching the radiation-sensitive component to the radiography cassette.

24. The radiation exposure detection device of claim 23, wherein the radiation-sensitive component includes a photo-emitting device.

25. The radiation exposure detection device of claim 23, wherein the radiation-sensitive component includes a clock, and wherein the signal provided by the radiation-sensitive component includes time information that is indicative of when the radiation exposure occurred.

26. The radiation exposure detection device of claim 25, wherein the radiation-sensitive component includes a liquid crystal display on which the time information is displayed.

27. The radiation exposure detection device of claim 23, wherein the radiation sensitive component includes at least one of an output terminal and a wireless transmitter for providing the signal to a remote location.

28. The radiation exposure detection device of claim 23, wherein the signal is at least one of: indicative of an accumulated amount of radiation exposure; and a control signal capable of causing a radiation source to modify its operation.

29. A radiography method comprising:
providing a first radiation exposure recording medium;
providing a first radiation exposure detector; and
sensing an exposure of radiation at the first radiation exposure detector.
30. The radiography method of claim 29, further comprising:
providing a first indication that the exposure of radiation has occurred when
the exposure of radiation has been sensed.
31. The radiography method of claim 30, recording a time at which the exposure
of radiation has occurred.
32. The radiography method of claim 31, wherein the providing of the indication
includes displaying the time at which the exposure of radiation has occurred on a
liquid crystal display.
33. The radiography method of claim 30, wherein the indication is provided by
way of at least one of an output terminal capable of being coupled to a remote
device and a wireless transmitter capable of transmitting a signal related to the
indication to the remote device, and wherein providing of the indication occurs by
5 way of a conventional communications protocol.
34. The radiography method of claim 30, further comprising providing a second
radiation exposure detector, and sensing an exposure of radiation at the second
radiation exposure detector.
35. The radiography method of claim 29, wherein the first indication indicates an
accumulated amount of the exposure of radiation that has occurred.